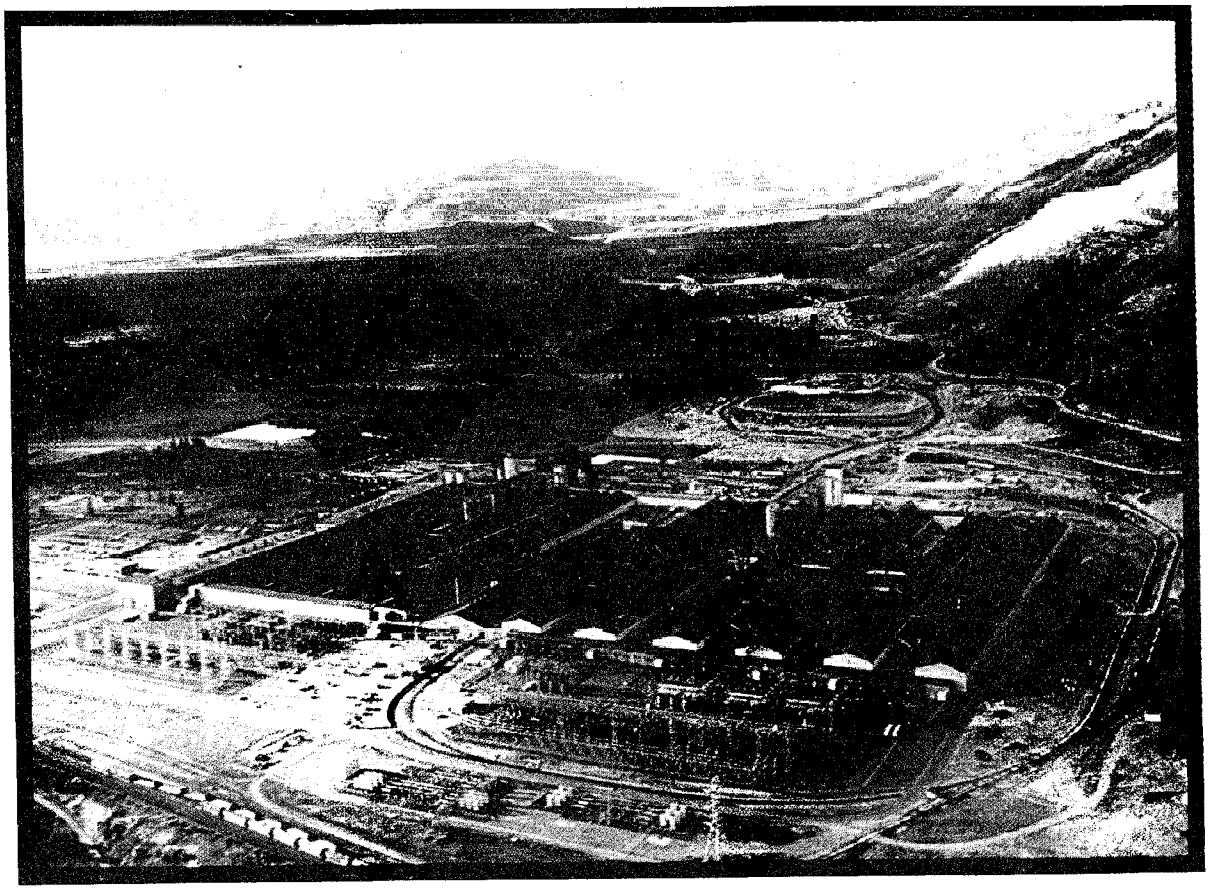

ARCO Metals Company

Primary Aluminum Reduction Plant
Columbia Falls, Montana

ARCF00002548

Location and General Description

- Located in northwestern Montana at the base of Teakettle Mountain; 2 miles northeast of Columbia Falls, Montana (Flathead County); 17 miles from Kalispell, Montana; just southwest of Glacier National Park.
- 255 miles east of Spokane, Washington; 62 miles south of the Canadian border.
- 3037 feet above sea level.
- Site area:

Fenced plant site	220 acres
Buffer property	3,712 acres
TOTAL	3,932 acres

- Building area:

Manufacturing	1,750,000 square feet
Warehouse and shipping	137,000 square feet
Other	122,200 square feet
TOTAL	2,009,200 square feet

- Rated annual aluminum production capacity 180,000 tons
- Product:
  Various sizes and alloys of primary aluminum ingot
  —Rolling ingot
  —Remelt ingot
  —Foundry ingot

History of The Facility

- Construction of first two potlines began in 1952.
- First two potlines started production in 1955.
- Third potline added in 1965.
- Fourth and fifth potlines added in 1968.
- Sumitomo technology purchased and installed 1977-1981 in order to satisfy State of Montana environmental control relations and to reduce electrical costs.

Production Technology and Capabilities

- Pechiney vertical stud Soderberg reduction cells, modified by Sumitomo Technology.
- Five potlines, 120 pots per line, end to end in 10 pot rooms.
- Nine furnaces, 4 casting pits, 1 "pig" casting machine.
- Rod mill facility.
- Virtually self-sufficient for all operational and maintance requirements.
- Among the lowest in energy costs of all aluminum producers in the Pacific Northwest.

Electrical Supply

- Industrial firm power purchased from the Bonneville Power Administration.
- 20-year contract (effective July 1, 1981), cancellable in part or in whole with a one-year notice.
- Maximum power load available, 427.5 megawatts.
- Electrical load at plant capacity, 346 megawatts.

Natural Gas Supply

- Natural gas purchased from the Montana Power Company, from reserves in both the U.S. and Canada.

Alumina Storage and Handling

- Alumina transloaded from ocean vessels at Port Everett, Washington at a maximum rate of 8,800 tons per day.

- Alumina storage capacity:

Port Everett—	55,000 tons
Columbia Falls—	59,000 tons
TOTAL	114,000 tons

- Rail transport for alumina, other materials and finished goods provided by the Burlington Northern.

Labor and Management

- Hourly labor represented by the Aluminum Workers Trade Council, AFL-CIO.
- Current labor contract expires September 15, 1986.
- No significant work stoppages have ever been caused by labor or contract disputes.
- Cooperative labor environment with less restrictive work rules than most other comparable U.S. facilities.
- Average years of service for hourly employees is over 14 years.
- Absentee rate is 1.5%, over the last three years.
- Experienced managerial and professional employees.

Environmental Compliance Record

- In compliance with all applicable state and federal rules concerning fluoride and particulate emissions.
- Principal environmental control equipment are a dry scrubber system (Alcoa 398) and 15 baghouses.
- Fluoride emissions from cell operations have been reduced from 2500 pounds per day to 1000 pounds per day by the Sumitomo technology modifications.

Community Climate

- Plant management extensively involved in state and local civic and government activities.
- ARCO provides 10% of the direct income to the Flathead Valley area.
- Communications with community have been handled in a very intensive and proactive fashion producing significant support for energy legislation, environmental matters and productivity improvement.
- Flathead Valley is a significant outdoor recreational area with Glacier National park and major ski resort. Tourism is the area's growth business.

Capital Spending

- Major maintenance/upgrade program completed in 1981.
- Average annual spending:
  1977-1981, was $11.4 million;
  1982-1983, was $2.2 million.
- Required capital spending for 1985-1990 is estimated to average $3.7 million per year.